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PUBLIC SERVICE COMMISSION

October 28, 2004

HAND DELIVERED

Ms. Elizabeth O'Donnell Executive Director Public Service Commission 211 Sower Boulevard Frankfort, KY 40602

Case 2004-00423

Dear Ms. O'Donnell:

Please find enclosed for filing with the Commission an original and ten (10) copies of the Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity, and a Site Compatibility Certificate, for the Construction of a 278 MW Circulating Fluidized Bed Coal Fired Generating Unit in Mason County, Kentucky. Also included are an original and ten (10) copies of a Petition for Confidential Treatment of Information relating to certain designated information contained in exhibits to this Application.

Very truly yours,

Charles A. Lile

Senior Corporate Counsel

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Enclosures

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COMMONWEALTH OF KENTUCKY

OCT 28 2004

BEFORE THE PUBLIC SERVICE COMMISSION

PUBLIC SERVICE COMMISSION

THE APPLICATION OF EAST KENTUCKY POWER)
COOPERATIVE, INC. FOR A CERTIFICATE OF PUBLIC)
CONVENIENCE AND NECESSITY, AND A SITE)
COMPATIBILITY CERTIFICATE, FOR THE) CASE NO. 2004-00423
CONSTRUCTION OF A 278 MW (NOMINAL))
CIRCULATING FLUIDIZED BED COAL FIRED UNIT IN)
MASON COUNTY, KENTUCKY)

PETITION FOR CONFIDENTIAL TREATMENT OF INFORMATION

Comes East Kentucky Power Cooperative, Inc., hereinafter referred to as "EKPC", and petitions the Public Service Commission, hereinafter referred to as the "Commission", pursuant to 807 KAR 5:001 Section 7 and KRS §61.878 and related statutes, for confidential treatment of certain designated information contained in the exhibits to the Application filed in this case. As grounds for this Petition, EKPC states as follows:

1. 807 KAR 5:001 Section 7 authorizes confidential treatment of information submitted to the Commission based on grounds provided in KRS §61.870 et seq. EKPC asserts that the information identified in the abovementioned exhibits to the Application in this case are records generally recognized as proprietary and confidential which, if made public, would permit an unfair commercial advantage to competitors of EKPC, as more fully explained hereinbelow. As such, this information should be granted confidential treatment pursuant to 801 KAR 5:001 Section 7 and KRS §61.878 (1)(c)(1).

- 2. The information designated as confidential in Exhibits 1, 4 and 8 to the Application in this case, relates to the price of the Circulating Fluidized Bed generating unit selected in EKPC's Request for Proposals (RFP). EKPC is still reviewing the proposals received in response to the RFP in regard to the selection of the best available alternative for an additional increment of baseload capacity needed by the EKPC system. Public release of the pricing information for this first selected baseload project at this time could complicate negotiations with short list bidders for this second increment of baseload capacity. Knowledge of such pricing information could allow short list bidders to be less competitive in final negotiations for this additional capacity, and disclosure of information indicating the relative position of EKPC's first selected project in regard to other proposals, could result in less competitive proposals in response to future EKPC RFPs. Any release of this confidential information which raises EKPC's power production costs would make its surplus energy less competitive on the wholesale bulk power market, giving EKPC's competitors an unfair competitive advantage.
- 3. The information designated as confidential in Exhibit 6 to the Application in this case, relates to the five year annual cost estimates for the new baseload unit. If competitors of EKPC in the bulk power market obtain this annual cost information, they will know EKPC's cost of this power and could use this information to underbid EKPC in any attempts to market surplus power. Knowledge of such information would also give potential purchasers of this power an unfair advantage in any negotiations on the price for the resale of the surplus power. EKPC competitors would thereby gain an unfair advantage which would have the detrimental effect on EKPC and its member systems of diminishing the potential revenues from the resale of this surplus power.

- 4. The estimate of the cost of transmission facilities required for interconnection of the new baseload unit, referenced in Exhibits 1, 8 and 10, if disclosed to the public, would unfairly allow equipment bidders to manipulate their pricing for the needed facilities. Proposals for such equipment have not yet been solicited, and bid manipulation could result in EKPC paying more than a truly competitive price for such facilities. Such an increase in the cost for such transmission facilities would have an incremental adverse impact on the overall project cost, which would unfairly impact EKPC's costs of surplus power.
 - 5. EKPC also believes that all of the identified confidential information is protected from public disclosure pursuant to KRS §61.878 (1)(c)(2)(c) as confidential and proprietary records disclosed to the Commission in conjunction with its regulation of commercial enterprise, apart from any unfair commercial advantage public disclosure would provide to EKPC competitors.
 - 6. All of the identified confidential information is treated as confidential and proprietary by EKPC. This information is not known outside EKPC, except for information developed by a bidder and submitted on a confidential basis, and it is distributed within EKPC only to those with a need to know or use it for EKPC business purposes.
 - 7. A set of the pages from the designated Application exhibits, with confidential information highlighted or otherwise indicated, is attached hereto. Ten copies of that Application, with confidential information redacted, are also enclosed.

WHEREFORE, Applicant respectfully requests the Commission to grant confidential treatment to the identified information and deny public disclosure of the information pursuant to 807 KAR 5:001 Section 7.

Respectfully submitted,

ATTORNEYS FOR EAST KENTUCKY POWER COOPERATIVE, INC.

P.O. BOX 707

WINCHESTER, KY 40392-0707

(606) 744-4812

CERTIFICATE OF SERVICE

This is to certify that an original and ten copies of the foregoing Petition for Confidential Treatment of Information in the above-referenced case were delivered to Elizabeth O'Donnell, Executive Director, Public Service Commission, 211 Sower Boulevard, Frankfort, Kentucky 40601 on this 28th day of October 2004.

CHARLES A. LILE

(Spur4-pet-confid)

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

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OCT 28 2004

PUBLIC SERVICE

THE APPLICATION OF EAST KENTUCKY POWER) COMMISSION
COOPERATIVE, INC. FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY, AND A SITE)
COMPATIBILITY CERTIFICATE, FOR THE) CASE NO. 2004-00423
CONSTRUCTION OF A 278 MW (NOMINAL) CIRCULATING FLUIDIZED BED COAL FIRED UNIT IN))
MASON COUNTY, KENTUCKY	} FILED

OCT 28 2004

APPLICATION

PUBLIC SERVICE COMMISSION

- 1. Applicant, East Kentucky Power Cooperative, Inc., hereinafter referred to as ion "EKPC", Post Office Box 707, 4775 Lexington Road, Winchester, Kentucky 40392-0707, files this Application for a Certificate of Public Convenience and Necessity and a Site Compatibility Certificate for the construction of a 278 MW coal-fired generating unit utilizing a circulating fluidized bed ("CFB") boiler at the Hugh L. Spurlock Power Station ("Spurlock 4") located in Mason County, Kentucky, on the Ohio River near Maysville, Kentucky, and related transmission interconnection facilities.
- 2. This Application is made pursuant to KRS §278.020, 278.216 and related statutes, and 807 KAR 5:001 Sections 8, 9, and related sections.
- 3. A copy of Applicant's restated Articles of Incorporation and all amendments thereto was filed with the Public Service Commission (the "Commission") in PSC Case No. 90-197, the Application of East Kentucky Power Cooperative for a Certificate of Public Convenience and Necessity to Construct Certain Steam Service Facilities in Mason County, Kentucky.
 - 4. A copy of the resolution from Applicant's Board of Directors approving the

filing of this Application, and approving the procurement and construction of the proposed facilities, and use of general funds for the proposed facilities are filed herewith as Applicant's Exhibit 1.

5. Pursuant to KRS §278.020 and 807 KAR 5:001, Section 9, Applicant states the power requirements of EKPC and its sixteen (16) member distribution cooperatives and Warren RECC, a distribution cooperative with headquarters in Bowling Green, Kentucky, require the construction of the proposed generating unit which is more fully described in the various exhibits filed with this Application. Warren RECC will become a member distribution cooperative of EKPC on April 1, 2008. As evidence of Warren RECC's membership in EKPC, Applicant submits a copy of the Special Membership Agreement between EKPC and Warren RECC as Applicant's Exhibit 15 and a copy of the Wholesale Power Contract between EKPC and Warren RECC as Applicant's Exhibit 16. These documents were executed by Warren RECC and EKPC on May 27, 2004.

In further support of Applicant's contention that the public convenience and necessity requires, or will require, the proposed facilities, Applicant submits the following:

(a) The need for the proposed generating units and the alternatives considered, are documented in EKPC's "2004 Load Forecast Report" ("2004 LFR"), approved by EKPC's Board on September 14, 2004, the Executive Summary designated as Applicant's Exhibit 2; EKPC's "Integrated Resource Plan" ("IRP"), dated April 21, 2003, filed in PSC Case No. 2003-00051, which is hereby incorporated by reference as a part of this Application; the "IRP Update

Report", designated as Applicant's Exhibit 3; and the "RFP No. 2004-01 Proposal Evaluation Process" ("RFP Summary"), designated as Applicant's Exhibit 4.

- (b) A description of the proposed Spurlock 4 coal fired unit is included as Applicant's Exhibit 5. Maps showing the proposed site for Spurlock 4 are also included in Exhibit 5. It is not anticipated that the proposed facilities will compete with any other public utilities, corporations, or persons.
- (c) A Construction permit for the proposed unit was applied for on September 13, 2004, and is pending approval by the Division for Air Quality. An environmental assessment report for the site is designated as Applicant's Exhibit 14, to demonstrate compliance with the National Environmental Policy Act ("NEPA") pursuant to the provisions of KRS §278.216 (2). The Hugh L. Spurlock Power Station is an existing site which complies with NEPA, as evidenced by the Finding of No Significant Impact, issued by the Rural Utilities Service ("RUS") in February 2002, which is included in Applicant's Exhibit 14, and all relevant siting issues regarding the proposed Spurlock 4 unit have been addressed during the process of obtaining approvals for the construction of previous units at the site.
- 6. The manner of financing proposed for the project, which will include the issuance of indebtedness to the United States of America, through the RUS is discussed in the prepared Testimony of David G. Eames, which is included as Applicant's Exhibit 8. Since U. S. Government financing is anticipated, which does not require Commission approval under KRS §278.300(10), no request for financing approval is made herein.

- 7. The five-year annual cost estimates for Spurlock 4 for calendar years 2008 through 2012 are shown in Applicant's Exhibit 6, based on a commercial operation date of April 1, 2008.
- 8. In further support for this Application, EKPC offers additional prepared testimony as follows:
- a. The prepared testimony of Roy M. Palk, concerning how this project supports EKPC's corporate mission, is attached as Applicant's Exhibit 7.
- b. The prepared testimony of David G. Eames concerning the need and economic justification for Spurlock 4 and the financial impacts of the proposed facilities, is also included as Applicant's Exhibit 8.
- c. The prepared testimony of Robert Hughes, concerning the environmental permitting and licensing issues, is attached as Applicant's Exhibit 9.
- d. The prepared testimony of Paul C. Atchison concerning the transmission plan and interconnection facilities required for the proposed generating unit is attached as Applicant's Exhibit 10.
- e. The prepared testimony of James Shipp, concerning the engineering and construction of the proposed generating unit, is attached as Applicant's Exhibit 11.
- f. The prepared testimony of Jerry Bordes concerning fuel procurement requirements for the proposed generating unit is attached as Applicant's Exhibit 12.
- g. The prepared testimony of James C. Lamb, concerning the 2004 LFR, is attached as Applicant's Exhibit 13.
- 9. It is critical for EKPC to have the proposed generating unit in service beginning on April 1, 2008 to meet the load requirements of Warren RECC beginning on

that date. This schedule for commercial operation requires EKPC to request an expedited review of this Application by the Commission. EKPC will use all reasonable efforts to facilitate this process.

10. EKPC wishes to advise the Commission that it is still evaluating the results of its Request for Proposals No. 2004-01 to select power supply alternatives for an additional 275 MW of baseload and 600 MW of peaking capacity needed by the EKPC system in 2006-2009. EKPC expects to file with the Commission a subsequent Application for necessary approvals regarding the chosen power supply options, and any necessary transmission facilities, in the near future. EKPC has elected to file this Application at this time, rather than to wait for the completion of that process, due to the urgency of the commercial operation schedule for the Spurlock 4 unit.

WHEREFORE, the Applicant, East Kentucky Power Cooperative, Inc., requests that this Commission perform an expedited review of this Application and issue an order:

- Certifying that the public convenience and necessity require the construction
 of the proposed generating units as described herein; AND
- 2. Granting a Site Compatibility Certificate for the proposed generating units.

Respectfully submitted,

Surstuly.
DALE W. HENLEY

CHARLES A. LILE

ATTORNEYS FOR APPLICANT EAST KENTUCKY POWER

COOPERATIVE, INC. P.O. BOX 707 WINCHESTER, KY 40392-0707 (859)744-4812

LIST OF EXHIBITS EAST KENTUCKY POWER COOPERATIVE, INC.

- 1. Board Resolution September 14, 2004
- 2. 2004 Load Forecast Report Executive Summary
- 3. IRP Update Report
- 4. RFP No. 2004-01 Proposal Evaluation Process
- 5. Description of the Proposed Facilities and Site
- 6. Five Year Annual Project Cost Estimate
- 7. Prepared Testimony of Roy M. Palk
- 8. Prepared Testimony of David G. Eames
- 9. Prepared Testimony of Robert E. Hughes
- 10. Prepared Testimony of Paul C. Atchison
- 11. Prepared Testimony of James Shipp
- 12. Prepared Testimony of Jerry Bordes
- 13. Prepared Testimony of James C. Lamb
- 14. Environmental Assessment for Gilbert Unit 3 and Unit 4
- 15. Warren RECC Special Membership Agreement
- 16. Wholesale Power Contract between EKPC and Warren REC

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EXHIBIT 1

BOARD RESOLUTION SEPTEMBER 14, 2004

FROM THE MINUTE BOOK OF PROCEEDINGS OF THE BOARD OF DIRECTORS OF EAST KENTUCKY POWER COOPERATIVE, INC.

FROM THE MINUTE BOOK OF PROCEEDINGS OF THE BOARD OF DIRECTORS OF EAST KENTUCKY POWER COOPERATIVE, INC.

At a regular meeting of the Board of Directors of East Kentucky Power Cooperative, Inc. held at the Headquarters Building, 4775 Lexington Road, located in Winchester, Kentucky, on Tuesday, September 14, 2004, at 1:40 p. m., EDT, the following business was transacted:

Authorization of Spurlock Unit No. 4

After review of the applicable information, a motion was made by A. L. Rosenberger, seconded by Danny Divine, and, there being no further discussion, passed to approve the following:

Whereas, The power supply plan outlined in East Kentucky Power Cooperative, Inc's ("EKPC") 2003 Integrated Resource Plan has been revised due to significant changes in load requirements, primarily due to the addition of Warren RECC as a new member beginning April 1, 2008;

Whereas, EKPC issued Request for Proposals No. 2004-01 (the "RFP") to evaluate peaking and baseload capacity alternatives and determine the most economically competitive and reliable alternatives for supplying the needs of EKPC's member systems, including the capacity required for Warren;

Whereas, A circulating fluidized bed ("CFB") baseload coal-fired unit proposed by EKPC Power Production for construction at Spurlock Station was evaluated by EKPC's consultant, EnerVision, Inc., and EKPC's RFP evaluation staff as the lowest cost baseload alternative;

Whereas, EKPC management and the Fuel and Power Supply Committee recommend that the Board of Directors (the "Board") authorize the construction of, and approve the filing of an application for a Certificate of Public Convenience and Necessity with the Kentucky Public Service Commission requesting appropriate approvals for, a CFB baseload unit at Spurlock Station ("Spurlock 4") and the related electric transmission interconnection facilities, along with authority to file requests for any other permits, licenses or approvals necessary, including Rural Utilities Service ("RUS") and National Rural Utilities Cooperative Finance Corporation ("CFC") approvals, approval to use general funds, and environmental or other approvals, to construct and operate the project; and

Whereas, Pursuant to EKPC Board Policy No. 107, this item requires review by the Fuel and Power Supply Committee and approval of the EKPC Board, now, therefore, be it

Resolved, That the Board hereby authorizes the construction of a circulating fluidized bed baseload unit of approximately 278 MW at Spurlock Station, at an estimated cost of million, including GSU transformers (2008\$), plus necessary interconnection facilities at an estimated cost of million (2008\$); and

Resolved, That the President and Chief Executive Officer ("President and CEO") or his designee is hereby authorized to file an application for a Certificate of Public Convenience and Necessity and Site Compatibility requesting appropriate approvals to construct such circulating fluidized bed baseload unit at Spurlock Station and the related electric transmission interconnection facilities, along with requests for any other permits, licenses or approvals necessary, including environmental or other approvals, to construct and operate the project; and

Resolved, That the President and CEO, or his designee is authorized to seek all necessary and appropriate RUS and CFC approvals for said project, and to execute any necessary documents related to such approvals.

(Note: After the vote, the Vice-Chairman noted on the record Fleming-Mason's concern as to the effect, if any, which a partial requirements contract might have in financing.)

The foregoing is a true and exact copy of a resolution passed at a meeting called pursuant to proper notice at which a quorum was present and which now appears in the Minute Book of Proceedings of the Board of Directors of the Cooperative, and said resolution has not been rescinded or modified.

Witness my hand and seal this 14th day of September, 2004.

Sam Penn, Secretary

Corporate Seal

EXHIBIT 2

East Kentucky Power Cooperative 2004 Load Forecast Report Executive Summary

1.1 Summary

East Kentucky Power Cooperative Inc. ("EKPC") is a generation and transmission electric cooperative located in Winchester, Kentucky. It serves 16 member distribution cooperatives who serve over 475,000 retail customers. Member distribution cooperatives currently served by EKPC are listed below:

Big Sandy RECC

Jackson Energy Cooperative

Blue Grass Energy Coop. Corp.

Licking Valley RECC

Clark Energy Cooperative, Inc.

Nolin RECC

Cumberland Valley Electric

Owen Electric Cooperative

Cambonana vanoj Biodar

Salt River Electric Coop. Corp.

Fleming-Mason Energy Cooperative

Shelby Energy Cooperative, Inc.

Grayson RECC

Farmers RECC

South Kentucky RECC

Inter-County Energy Coop. Corp.

Taylor County RECC

In April of 2008, EKPC will begin all requirements service to Warren RECC. This summary contains a 20-year projection of peak demand and energy requirements for EKPC, representing the summation of the load forecasts for each of its 16 member distribution cooperatives and including Warren RECC beginning April 1 2008.

EKPC's load forecast is prepared every two years in accordance with EKPC's Rural Utilities Service ("RUS") approved Work Plan, which details the methodology employed in preparing the projections. EKPC prepares the load forecast by working jointly with member systems to prepare their load forecasts. Member projections are then summed to

determine EKPC's forecast for the 20-year period. Member cooperatives use their load forecasts in developing construction work plans, long range work plans, and financial forecasts. EKPC uses the load forecast in such areas as marketing analysis, transmission planning, power supply planning, and financial forecasting.

Historical and projected total energy requirements, seasonal peak demands, and annual load factor for the EKPC system are presented in Tables 1-1 through 1-3. Internal demand refers to EKPC's peak demand unadjusted for interruptible loads, and net demand refers to EKPC's firm peak demand, taking all adjustments into account. Both are based on coincident hourly-integrated demand intervals. Load Factor is calculated using net peak demand and energy requirements.

EKPC's load forecast indicates that total energy requirements are projected to increase by 3.6 percent per year over the 2004 through 2024 period. Net winter peak demand will increase by approximately 2,400 MW, and net summer peak demand will increase by approximately 2,100 MW. Annual load factor projections are slightly declining to around 53 percent.

Energy projections for the residential, small commercial, and large commercial classifications indicate that during the 2004 through 2024 period, sales to the residential class will increase by 3.6 percent per year, small commercial sales will increase by 3.6 percent per year, and large commercial sales will increase by 4.5 percent per year. Class sales are presented in Tables 1-4. Please note the energy use projection for Gallatin Steel in Table 1-4. EKPC and Owen Electric (Gallatin Steel's electric provider) expect Gallatin Steel to use 1,000,000 MWh per year, adjusted by 360 hours of interruption each

Load Forecast Growth Rates

	2004-2009	2004-2014	2004-2024
Total Energy Requirements	6.5%	4.6%	3.6%
Residential Sales	5.6%	4.2%	3.6%
Small Commercial Sales	6.7%	4.8%	3.6%
Large Commercial Sales	11.5%	7.0%	4.5%
Firm Winter Peak Demand	6.8%	4.8%	3.7%
Firm Summer Peak Demand	7.0%	4.8%	3.7%

year.

Factors considered in preparing the forecast include national, regional, and local economic performance, appliance saturations and efficiencies, population and housing trends, service area industrial development, electric price, household income, and weather.

Table 1-1
Historical and Projected Winter Peak Demand

Gallatin Steel								
	Total Internal	Interruptible	Other	Net Peak				
		•		Demand				
	Peak Demand	Demand	Interruptible					
Season	(MW)	(MW)	(MW)	(MW)				
4004 00	4.007	0	0	1.007				
1981 - 82	1,087	0	0	1,087				
1982 - 83	845	0	0	845				
1983 - 84	1,151	0	0	1,151				
1984 - 85	1,125	0	0	1,125				
1985 - 86	1,039	0	0	1,039				
1986 - 87	983	0	0	983				
1987 - 88	1,104	0	0	1,104				
1988 - 89	1,114	0	0	1,114				
1989 - 90	1,449	0	0	1,449				
1990 - 91	1,306	0	0	1,306				
1991 - 92	1,383	0	0	1,383				
1992 - 93	1,473	0	0	1,473				
1993 - 94	1,788	0	0	1,788				
1994 - 95	1,621	0	0	1,621				
1995 - 96	1,990	75	0	1,915				
1996 - 97	2,004	51	0	1,953				
1997 - 98	1,789	93	14	1,682				
1998 - 99	2,096	108	17	1,971				
1999 - 00	2,169	12	17	2,140				
2000 - 01	2,322	27	17	2,278				
2001 - 02	2,238	129	17	2,092				
2002 - 03	2,568	109	24	2,435				
2003 - 04	2,612	97	26	2,489				
2004 - 05	2,794	135	26	2,633				
2005 - 06	2,893	135	26	2,732				
2006 - 07	2,999	135	26	2,838				
2007 - 08	3,085	135	26	2,924				
2008 - 09	3,623	135	26	3,462				
2009 - 10	3,726	135	26	3,565				
2010 - 11	3,818	135	26	3,657				
2011 - 12	3,914	135	26	3,753				
2012 - 13	4,033	135	26	3,872				
2013 - 14	4,141	135	26	3,980				
2014 - 15	4,246	135	26	4,085				
2015- 16	4,341	135	26	4,180				
2016 - 17	4,466	135	26	4,305				
2017 - 18	4,584	135	26	4,423				
2018 - 19	4,709	135	26	4,548				
2019 - 20	4,823	135	26	4,662				
2020 - 21	4,959	135	26	4,798				
2021 - 22	5,083	135	26	4,922				
2022 - 23	5,208	135	26	5,047				
2022 - 23	5,319	135	26	5,158				

Table 1-2
Historical and Projected Summer Peak Demand

		Gallatin Steel		
	Total Internal	Interruptible	Other	Net Peak
	Peak Demand	Demand	Interruptible	Demand
Season	(MW)	(MW)	(MW)	(MW)
1982	694	0	0	694
1983	789	0	0	789
1984	722	0	0	722
1985	776	0	0	776
1986	857	0	0	857
1987	906	0	0	906
1988	1,055	0	0	1,055
1989	1,010	0	0	1,010
1990	1,079	0	0	1,079
1991	1,164	0	0	1,164
1992	1,131	0	0	1,131
1993	1,309	0	0	1,309
1994	1,314	0	0	1,314
1995	1,518	52	0	1,466
1996	1,540	88	0	1,452
1997	1,650	101	0	1,549
1998	1,675	4	17	1,654
1999	1,754	4	12	1,738
2000	1,941	86	23	1,832
2001	1,980	116	23	1,841
2002	2,120	119	23	1,978
2003	1,996	125	26	1,845
2004	2,197	135	26	2,036
2005	2,294	135	26	2,133
2006	2,377	135	26	2,216
2007	2,461	135	26	2,300
2008	2,930	135	26	2,769
2009	3,017	135	26	2,856
2010	3,098	135	26	2,937
2010	3,174	135	26	3,013
2011	3,250	135	26	3,089
	3,341	135	26	3,180
2013	3,426	135	26	3,265
2014		135	26	3,347
2015	3,508	135	26	3,423
2016	3,584	135	26	3,519
2017	3,680	135	26	3,612
2018	3,773		26	3,709
2019	3,870	135	26	
2020	3,955	135		3,794
2021	4,059	135	26	3,898
2022	4,155	135	26	3,994
2023	4,249	135	26	4,088
2024	4,340	135	26	4,179

Table 1-3
Historical and Projected Peak Demands
And Total Requirements

			tai Keyulleli			
Season	Net Winter Peak Demand (MW)	Year	Net Summer Peak Demand (MW)	Year	Total Requirements (MWh)	Load Factor (%)
CCGCCII	(,,,,,	,				
1981 - 82	1,087	1982	694	1982	3,904,954	40.9%
1982 - 83	845	1983	789	1983	4,099,007	55.4%
1983 - 84	1,151	1984	722	1984	4,095,268	40.6%
1984 - 85	1,125	1985	776	1985	4,264,517	43.3%
1985 - 86	1,039	1986	857	1986	4,470,627	49.0%
1986 - 87	983	1987	906	1987	4,710,898	54.7%
1987 - 88	1,104	1988	1,055	1988	5,122,703	53.0%
1988 - 89	1,114	1989	1,010	1989	5,347,081	54.8%
1989 - 90	1,449	1990	1,079	1990	5,489,092	43.1%
1990 - 91	1,306	1991	1,164	1991	5,958,422	52.1%
1991 - 92	1,383	1992	1,131	1992	6,099,308	50.3%
1992 - 93	1,473	1993	1,309	1993	6,860,902	53.2%
1993 - 94	1,788	1994	1,314	1994	6,917,414	44.0%
1994 - 95	1,621	1995	1,466	1995	7,761,980	54.7%
1995 - 96	1,915	1996	1,452	1996	8,505,621	50.7%
1996 - 97	1,953	1997	1,549	1997	8,850,394	51.7%
1997 - 98	1,682	1998	1,654	1998	9,073,950	61.4%
1998 - 99	1,971	1999	1,738	1999	9,825,866	56.9%
1999 - 00	2,140	2000	1,832	2000	10,521,400	56.1%
2000 - 01	2,278	2001	1,841	2001	10,750,900	53.9%
2001 - 02	2,092	2002	1,978	2002	11,456,830	62.3%
2002 - 03	2,435	2003	1,845	2003	11,568,314	54.2%
2003 - 04	2,489	2004	2,036	2004	12,055,905	55.3%
2004 - 05	2,633	2005	2,133	2005	12,506,284	54.2%
2005 - 06	2,732	2006	2,216	2006	12,974,673	54.1%
2006 - 07	2,838	2007	2,300	2007	13,463,856	54.2%
2007 - 08	2,924	2008	2,769	2008	15,509,448	60.6%
2008 - 09	3,462	2009	2,856	2009	16,542,462	54.5%
2009 - 10	3,565	2010	2,937	2010	17,007,296	54.3%
2010 - 11	3,657	2011	3,013	2011	17,433,751	54.4%
2011 - 12	3,753	2012	3,089	2012	17,916,519	54.5%
2012 - 13	3,872	2013	3,180	2013	18,404,516	54.3%
2013 - 14	3,980	2014	3,265	2014	18,896,493	54.1%
2014 - 15	4,085	2015	3,347	2015	19,373,012	54.1%
2015- 16	4,180	2016	3,423	2016	19,861,626	54.2%
2016 - 17	4,305	2017	3,519	2017	20,366,928	54.0%
2017 - 18	4,423	2018	3,612	2018	20,900,624	53.8%
2018 - 19	4,548	2019	3,709	2019	21,459,656	53.9%
2019 - 20	4,662	2020	3,794	2020	22,023,701	53.9%
2020 - 21	4,798	2021	3,898	2021	22,566,676	53.7%
2021 - 22	4,922	2022	3,994	2022	23,125,176	53.5%
2022 - 23	5,047	2023	4,088	2023	23,685,187	53.6%
2023 - 24	5,158	2024	4,179	2024	24,286,700	53.8%

Table 1-4
2004 Load Forecast
Total Member System Retail Energy Sales

			Small		Large			
	Residential	Seasonal	Comm.	Public	Comm.		Other	Total Retail
	Sales	Sales	Sales	Buildings	Sales	Gallatin Steel	Sales	Sales
Year	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)	(MWh)
1990	3,483,232	9,652	813,371	22,879	653,502	0	3,736	4,986,373
1991	3,755,282	9,791	868,032	25,182	722,743	0	4,029	5,385,059
1992	3,798,270	10,100	913,599	26,549	775,544	0	4,305	5,528,366
1993	4,213,871	10,478	980,290	30,060	970,137	0	5,081	6,209,917
1994	4,268,682	10,591	1,014,549	30,347	1,029,178	0	4,156	6,357,502
1995	4,575,282	11,355	1,098,885	33,261	1,119,902	279,070	5,042	7,122,797
1996	4,857,938	12,629	1,082,019	34,242	1,243,107	640,756	5,552	7,876,243
1997	4,883,875	12,075	1,163,683	33,267	1,258,816	755,279	5,663	8,112,659
1998	5,091,880	11,650	1,230,451	34,263	1,349,895	696,051	5,601	8,419,790
1999	5,303,413	11,652	1,337,008	34,947	1,415,803	901,686	5,757	9,010,267
2000	5,607,950	12,648	1,493,650	38,061	1,498,745	917,983	6,160	9,575,197
2001	5,777,378	12,954	1,490,670	39,197	1,686,653	992,711	6,545	10,006,107
2002	5,946,686	14,703	1,571,381	40,725	1,790,693	1,005,493	6,860	10,376,541
2003	6,156,774	15,487	1,581,188	42,689	1,906,861	1,007,676	7,087	10,717,762
2004	6,497,216	14,307	1,630,602	45,531	1,968,664	961,632	7,694	11,125,647
2005	6,682,941	14,825	1,694,044	46,612	2,132,344	960,781	7,949	11,539,497
2006	6,918,457	15,524	1,757,692	47,856	2,261,427	960,951	8,213	11,970,119
2007	7,183,613	16,294	1,822,141	49,201	2,379,982	960,435	8,483	12,420,150
2008	7,963,634	17,003	2,129,583	50,512	3,137,941	961,056	12,482	14,272,210
2009	8,526,792	17,680	2,257,539	51,802	3,394,380	962,376	14,205	15,224,774
2010	8,769,805	18,327	2,328,603	53,030	3,504,926	962,267	14,639	15,651,597
2011	9,005,166	18,968	2,399,739	54,245	3,589,580	960,119	15,077	16,042,894
2012	9,277,560	19,711	2,467,666	55,471	3,689,892	960,160	15,522	16,485,982
2013	9,568,763	20,495	2,534,710	56,735	3,776,751	960,424	15,968	16,933,848
2014	9,849,132	21,220	2,602,619	58,006	3,876,151	961,931	16,418	17,385,477
2015	10,132,987	21,930	2,670,899	59,279	3,959,598	961,610	16,869	17,823,172
2016	10,418,609	22,671	2,738,146	60,548	4,054,635	959,992	17,326	18,271,927
2017	10,734,638	23,534	2,808,274	61,895	4,130,033	959,696	17,787	18,735,857
2018	11,060,111	24,472	2,880,072	63,309	4,220,103	959,191	18,251	19,225,508
2019	11,411,147	25,495	2,952,552	64,796	4,306,388	959,462	18,717	19,738,557
2020	11,759,902	26,543	3,025,190	66,179	4,397,448	961,566	19,194	20,256,022
2021	12,101,252	27,556	3,096,179	67,552	4,480,296	961,698	19,669	20,754,203
2022	12,447,462	28,578	3,166,734	68,928	4,575,322	959,323	20,150	21,266,497
2023	12,811,267	29,677	3,239,421	70,277	4,650,017	959,018	20,637	21,780,314
2024	13,194,533	30,814	3,314,701	71,684	4,740,172	959,015	21,129	22,332,048

Table 1-4 continued 2004 Load Forecast Energy Sales and Total Requirements

	Total Retail	Office	0.4	EKPC Sales to		Transmission	Total
	Sales	Use (MWh)	% Loss	Members (MWh)	EKPC Office Use (MWh)	Loss (%)	Requirements (MWh)
Year	(MWh)						
1990	4,986,373	5,087	5.7	5,295,459	6,287	3.5	5,489,092
1991	5,385,059	5,333	6.3	5,755,588	6,798	3.4	5,958,422
1992	5,528,366	5,242	6.3	5,903,268	7,559	3.2	6,099,308
1993	6,209,917	5,552	6.0	6,612,687	8,026	3.6	6,860,902
1994	6,357,502	5,614	5.4	6,727,959	8,541	2.7	6,917,414
1995	7,122,797	5,711	5.7	7,558,452	9,197	2.6	7,761,980
1996	7,876,243	6,167	5.0	8,301,379	8,856	2.4	8,505,621
1997	8,112,659	6,349	5.1	8,559,022	8,505	3.3	8,850,394
1998	8,419,790	6,121	4.5	8,821,630	7,236	2.8	9,073,950
1999	9,010,267	6,040	4.8	9,472,955	8,157	3.6	9,825,866
2000	9,575,197	6,605	4.4	10,021,053	7,862	4.9	10,521,400
2001	10,006,107	6,752	4.0	10,426,995	8,205		10,750,900
2002	10,376,541	6,912	4.9	10,913,425	8,246		11,456,830
2003	10,717,762	6,911	4.8	11,260,295	8,287	2.7	11,568,314
2004	11,125,647	8,382	4.7	11,685,899	8,329	ļ	12,055,905
2005	11,539,497	8,382	4.7	12,122,725	8,370		12,506,284
2006	11,970,119	8,382	4.8	12,577,021	8,412	3.0	12,974,673
2007	12,420,150	8,382	4.8	13,051,486	8,454	3.0	13,463,856
2008	14,272,210	8,382	5.0	15,035,668	8,497	3.0	15,509,448
2009	15,224,774	8,382	5.0	16,037,649	8,539	3.0	16,542,462
2010	15,651,597	8,382	5.0	16,488,495	8,582	3.0	17,007,296
2011	16,042,894	8,382	5.0	16,902,113	8,625	3.0	17,433,751
2012	16,485,982	8,382	5.0	17,370,355	8,668	3.0	17,916,519
2013	16,933,848	8,382	5.1	17,843,670	8,711	3.0	18,404,516
2014	17,385,477	8,382	5.1	18,320,843	8,755	3.0	18,896,493
2015	17,823,172	8,382	5.1	18,783,024	8,798	3.0	19,373,012
2016	18,271,927	8,382	5.1	19,256,935	8,842	3.0	19,861,626
2017	18,735,857	8,382	5.1	19,747,033	8,887	3.0	20,366,928
2018	19,225,508	8,382	5.1	20,264,674	8,931	3.0	20,900,624
2019	19,738,557	8,382	5.1	20,806,890	8,976	3.0	21,459,656
2020	20,256,022	8,382	5.1	21,353,969	9,021	3.0	22,023,701
2021	20,754,203	8,382	5.1	21,880,610	9,066	3.0	22,566,676
2022	21,266,497	8,382	5.1	22,422,310	9,111	3.0	23,125,176
2023	21,780,314	8,382	5.1	22,965,474	9,157	3.0	23,685,187
2024	22,332,048	8,382	5.1	23,548,897	9,202	3.0	24,286,700

EXHIBIT 3

IRP UPDATE REPORT

2003 Integrated Resource Plan

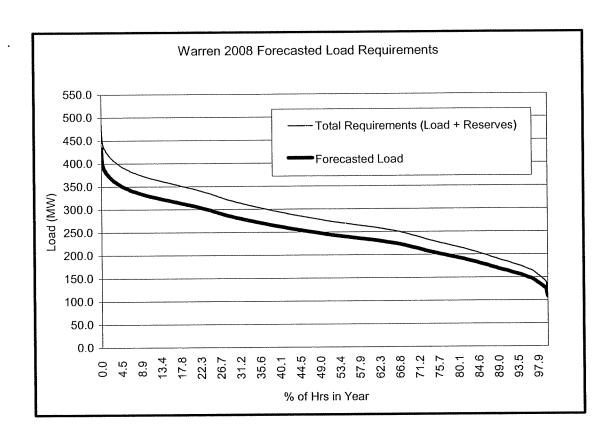
East Kentucky Power Cooperative ("EKPC") has revised its power supply plan due to a significant change in the expected load requirements, and an update of the load forecast. The current plan is documented in EKPC's 2003 Integrated Resource Plan ("IRP") that was approved by the EKPC Board of Directors ("Board") at the April 2003 Board Meeting and was filed with the Commission on April 21, 2003, as Case No. 2003-00051. The 2003 IRP documented the need for approximately 500 MW (summer rating) of peaking capacity to be added from 2004 to the summer of 2009 to meet summer peak load requirements. An additional baseload unit similar to the Gilbert Unit was planned to be in service by the summer of 2011. These needs are based on the strategy of acquiring firm resources available all year to meet summer capacity needs, and buying winter seasonal capacity to make up the additional resource needs to meet the winter peak. The long-term reserve margin target used by EKPC for acquiring resources is 12 %. EKPC tries to add resources to meet a minimum of a 12 % reserve margin for the summer peak while keeping any purchases needed to meet the winter peak to a level EKPC believes can be imported reliably. Following is a discussion of the status of the current power supply plan and the need to revise the plan.

Capacity Under Construction

EKPC issued RFP No. 2002-02 in December 2002 and subsequently entered into contracts with Calpine Corporation to provide and construct Smith CTs 6 and 7. The addition of Smith CTs 6 and 7 will provide a portion (approximately 150 MW, summer rating) of the peaking capacity need in the 2004-2009 time period in the IRP plan. Smith CTs 6-7 are expected to achieve commercial operation in January 2005. The Gilbert Unit at Spurlock Power Station is scheduled for commercial operation April 1, 2005 and is currently on schedule to meet that date. The Gilbert Unit will provide an additional 268MW of baseload capacity.

Warren RECC Becomes EKPC Member System

The most important factor in revising the power supply plan was the addition of a new member to the EKPC system. Warren RECC ("Warren") accepted an offer to become a member of EKPC beginning April 1, 2008. Warren signed a 33-year wholesale power agreement with EKPC on May 27, 2004. The addition of Warren to the EKPC system will have a significant impact on EKPC's power supply plan. A graph of Warren's 2008 forecasted load and total requirements based on the 2004 Load Forecast Report is shown below in duration curve format.



2004 Load Forecast Report

The EKPC Board approved the 2004 Load Forecast Report ("2004 LFR") at the September 2004 Board meeting. This important update of EKPC's load requirements includes a forecast of Warren's load beginning April 1, 2008. EKPC staff met with Warren to develop their forecast the same as for the current member systems. Warren's forecast was then rolled into the forecast for the current member systems. Another

important change in the 2004 LFR is that the summer peaks are lower than forecasted in the 2002 Load Forecast Report by approximately 100 MW and the winter peaks are slightly higher.

Power Supply Study for Warren

EKPC staff utilized the Base-Intermediate-Peak ("BIP") model to evaluate the optimal generation mix to meet Warren's capacity needs. The BIP model is discussed in Exhibit 1 of EKPC's IRP. Warren's projected load data, along with EKPC's estimated capital costs, fuel costs, and O&M costs of resource alternatives were used by the model to determine the optimal mix of baseload, intermediate, and peaking resources that would be needed to best serve Warren. Based on Warren's load profile and the BIP analysis of resources, EKPC will need approximately 260 MW of baseload capacity and approximately 150 MW of peaking capacity to serve Warren beginning on April 1, 2008, plus reserves. A 268 MW circulating fluidized bed ("CFB") coal fired unit similar to the Gilbert Unit and the GE7EA combustion turbine with a capacity of 98 MW winter / 74 MW summer were selected as reasonable proxies for the capacity needs of Warren in the analysis. Costs for a combined cycle unit were also included to evaluate the need for an intermediate resource. Based on the resource costs provided as inputs, the model selected an optimal generation mix for Warren's load profile. The resource mix selected was 220 MW of baseload, 39 MW of intermediate, and 148 MW of peaking capacity. The amount of intermediate capacity selected was considered impractical to provide based on the small amount of capacity and high degree of dispatchability required for an intermediate resource. A coal-fired unit could provide the baseload and intermediate needs of Warren more effectively. Therefore, the baseload amount desired was 259 MW to cover both the baseload and intermediate needs.

Study on Future Baseload Capacity

EKPC staff initiated a study in the spring of 2004 to re-evaluate the timing of the baseload addition scheduled for 2011 in response to the increase in natural gas prices. Since the development of the 2003 IRP, natural gas prices have risen substantially and are expected to remain at higher levels than previously thought. Coal prices have also

risen and become more volatile. Assumptions on market prices, fuel prices, and capital costs were updated for the study. The study was initiated prior to Warren RECC committing to join the EKPC system and prior to completion of the 2004 LFR and therefore Warren's load was not included. The results of the study indicated that there was economic justification to advance the schedule for the baseload capacity addition scheduled in the IRP for 2011. With the addition of Warren and completion of the 2004 LFR, the study is being updated to re-affirm the results.

Capacity and Load Requirements

The following table, "Capacity and Load Summary," shows EKPC's load requirements compared to existing and committed capacity based on the 2004 LFR, including Warren. As shown in the table, EKPC will need a substantial increase in capacity by the summer of 2008 to meet the needs of Warren. Smaller increments of capacity will be needed in 2006 and 2007 to meet summer peak requirements and reduce the level of winter purchases needed. The table does not include any future capacity additions other than the Gilbert Unit and J. K. Smith CTs 6 and 7.

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Capacity and Load Summary

	Peak Forecast		Reserves Required *		Capacity Required		Existing & Committed		Surplus After Capacity	
							Capacity		Additions	
Year	WIN	SUM	WIN	SUM	WIN	SUM	WIN	SUM	WIN	SUM
2005	2,593	2,093	311	251	2,904	2,344	2,528	2,415	-376	71
2006	2,692	2,176	323	261	3,015	2,437	2,646	2,415	-369	-22
2007	2,798	2,260	336	271	3,134	2,531	2,646	2,415	-488	-116
2008	2,884	2,729	346	327	3,230	3,056	2,638	2,407	-592	-649
2009	3,422	2,816	411	338	3,833	3,154	2,638	2,407	-1,195	-747
2010	3,525	2,897	423	348	3,948	3,245	2,638	2,407	-1,310	-838
2011	3,617	2,973	434	357	4,051	3,330	2,638	2,407	-1,413	-923

Breakdown of Existing and Committed Capacity

	Coal l	Fired	Comb	ustion	Purch	ases	SEPA I	Hydro	Landfi	II Gas	Total C	apacity
			Turt	ines					Proj	ects		
Year	WIN	SUM	WIN	SUM	WIN	SUM	WIN	SUM	WIN	SUM	WIN	SUM
2005	1,387	1,655	812	581	150	0	170	170	9	9	2,528	2,415
2006	1,655	1,655	812	581	0	0	170	170	9	9	2,646	2,415
2007	1,655	1,655	812	581	0	0	170	170	9	9	2,646	2,415
2008	1,647	1,647	812	581	0	0	170	170	9	9	2,638	2,407
2009	1,647	1,647	812	581	0	0	170	170	9	9	2,638	2,407
2010	1,647	1,647	812	581	0	0	170	170	9	9	2,638	2,407
2011	1,647	1,647	812	581	0	0	170	170	9	9	2,638	2,407

Notes:

- Reserve Margin Goal is 12%.
- 150 MW winter / 75 MW summer purchase expires March 31, 2005.
- E. A. Gilbert unit assumed to be on-line by 4/1/05.
- Smith CTs 6 & 7 assumed to be on-line by 12/31/04.
- Peak Forecast reduced by 40MW for pumping station load.
- Peak Forecast excludes Gallatin Interruptible load and small interruptible loads.

Capacity Alternatives

Considering that Warren would likely become a new member in 2008, and the study on future baseload capacity that involved the timing of the baseload unit scheduled for 2011, EKPC issued RFP No. 2004-01 ("2004 RFP") on April 2, 2004 to meet the needs of its member systems including the addition of the Warren load. EKPC hired EnerVision, Inc., an energy services consultant, to help evaluate proposals from the RFP based on economics, transmission reliability, creditworthiness, environmental compatibility, and performance guarantees. The 2004 RFP was advertised in The Wall Street Journal, USA Today, and on the Energy Central website. A copy of the 2004 RFP was emailed to a distribution list of approximately 90 contacts made up of those responding to previous Requests For Proposals, Independent Power Producers, surrounding utilities, and other interested parties. The 2004 RFP was also sent to over 60 media contacts and was available on EKPC's website.

The 2004 RFP requested proposals for baseload and peaking capacity resources. EKPC's peaking capacity needs as requested in the 2004 RFP are as follows:

Date Requested By	Capacity Amount
June 1, 2005	up to 50 MW (DG Projects)
June 1, 2006	up to 200 MW
June 1, 2007	up to 200 MW (additional)
June 1, 2008	up to 200 MW (additional)
Note: The peakin	g requirements for June 1, 2006 include any distributed
generation ("DG") projects that may come on-line prior to June 1, 2006.

EKPC's baseload capacity needs as requested in the 2004 RFP are as follows:

Date Requested By	Capacity Amount

April 2008 275 MW

December 2008 275 MW (additional)

The alternatives considered for supplying the capacity needs requested in the 2004 RFP to meet EKPC's capacity needs are discussed in Exhibit 4, "RFP No. 2004-01 Proposal Evaluation Process." As discussed in Exhibit 4, EKPC's proposal for Spurlock 4 was the best evaluated baseload bid to provide for the capacity needs of Warren according to EnerVision's analysis. In the table entitled "RFP 2004-01 Summary of Results," included in Exhibit 4, EKPC is bidder #15 and Spurlock 4 is the proposal ranked number one. EKPC also has other proposals included in the baseload evaluation. There were several evaluation criteria in addition to price considered in the evaluation. The timing of new capacity was one of those criteria that was considered very important in meeting Warren's needs. Although the schedule will be tight, Spurlock 4 could be constructed in time to meet the April 1, 2008 date when Warren membership begins.

EXHIBIT 4

REQUEST FOR PROPOSAL (RFP) NO. 2004-01

Proposal Evaluation Process

EnerVision, Inc. (EVI) was contracted to provide an independent review of the Request for Proposals (RFP) responses received by East Kentucky Power Cooperative (EKPC). The steps involved in the bid evaluation process included both an initial review and a detailed analytical process.

Initial Review

EnerVision first conducted an initial review of the RFP responses. The basic question asked was, "Does the bidder meet the requirements of the RFP?" Answers to this question determined whether a bidder sufficiently met the requirements of the RFP to be included in the detailed analytical process. This initial screening was based on the following criteria as outlined in the RFP:

- Capacity Type -- The RFP outlined a need for both peaking and base capacity requirements. All proposals met this criterion except one.
- Timing The RFP outlined a specific time frame for both the peaking and baseload capacity needs. Even though some of the bidders were uncertain about meeting the proposed timeline, EnerVision and EKPC chose not to eliminate a bidder based on this criterion alone. If the bidder could illustrate that their proposal would be in operation close to the period outlined in the RFP, it was assumed that bridge power could be purchased to cover the EKPC need before the proposed capacity became commercially operational.
- Delivery The RFP requested the bidders to specify arrangements for firm transmission necessary to deliver power to an EKPC interconnect point. The majority of the proposals identified possible interconnection scenarios. EnerVision and EKPC decided not to eliminate a proposal based on insufficient interconnection information provided at this point in the process. It was determined that if a proposal demonstrated favorable economics during the detailed analytical process, then there would be a follow-up request for additional information pertaining to the interconnection plans.
- Price The RFP required pricing to be submitted with the proposal. One proposal was
 considered "Non-Responsive" during the initial review due to this criterion. This bidder
 did not provide any price information. EKPC contacted the bidder to request additional
 information and was provided the original packet without pricing. The proposal could not
 be evaluated from an economics perspective and was not included in the detailed
 analysis.

The next step in the initial review was to further understand the proposals received. Time was spent reviewing each proposal that was considered responsive to the RFP. This review included:

- Amount (MW) of the proposal Some of the bidders proposed the full amount of capacity that was requested in the RFP, while others bid a portion of that amount;
- Term (commercial operation, length of contract) The RFP requested peaking capacity for not less than 10 years in duration and base capacity for not less than fifteen (15) years in length. The majority of the proposals met these criteria, but offered varying lengths of contracts (10, 20, 30, etc.);
- Quality of proposal (acceptable technology) Proposals were reviewed to determine if the technology proposed was "acceptable". Is it a technology currently in use? If not, is it

- a new technology that other utilities are favorably considering? Familiarity with the technology provides a basis for understanding the risk associated with the project; and
- Deliverability (transmission constraints) Proposals were reviewed to determine if they
 would directly interconnect to the EKPC system or if transmission arrangements would be
 needed to deliver the power to the EKPC system. If the latter was the case, the
 proposals were reviewed to ascertain from which transmission system the power would
 be delivered to determine the appropriate line loss factor and point-to-point transmission
 cost that should be used in the economic analysis of the proposal.

Summaries were created for each proposal outlining the details relating to each item above and other various components of the deal. These summaries were utilized through-out the process and updated as additional information was provided from the bidder.

Detailed Analytical Process

Once RFP responses passed the initial review, a detailed analysis was performed to compare the proposals based on the following evaluation criteria: Economic Analysis (Price), Timing, Transmission, Permitting Status, Financial Viability, and Operations.

Economic Analysis (Price)

RFP responses were split into groups: Baseload (32 year economic life), Peaking (25 year economic life) and Distributed Generation (15 year economic life). Although EnerVision conducted their economic analysis independent of EKPC, the analyses were developed using consistent assumptions in order to create an "apples to apples" comparison. EnerVision worked with EKPC to verify assumptions such as capacity amount, term, heat rates, fuel prices, fixed and variable O&M, start-up costs, escalation rates, transmission issues, and site and technology specifications. Results were ranked based on both 3% and 6% discount rates for present value analysis. A 3% discount rate was used to simulate inflation while a 6% discount rate represents EKPC cost of funds. The following template was used in ranking the proposals based on economics for both the 3% and 6% discount rates:

Base Rankings

3%							
Rank	Bid	Average \$/MWh	Total Cost (2004\$)	First Year (\$/MWh) (2004\$)			
1							
2							
3							
4							
5							
Etc.							

This economics-based ranking determined which bidders received follow-up conference calls. For the baseload proposals, the top five bidders, besides the self-build proposal, were scheduled for calls. These conference calls were conducted in order to address any additional questions regarding the proposal structure and assumptions, including questions pertaining to the additional evaluation criteria.

Additional Evaluation Criteria

After completing the initial economic analyses, the following criteria were explored in order to finalize the detailed analytical evaluation of the proposals. The criteria were discussed with the bidders during both the conference calls and meetings held later at EKPC headquarters.

Timing

The commercial operation date of the resource was considered along with the term of the contract. As cited earlier, the RFP outlined a specific time frame for both the peaking and the base proposals. EKPC has a need for 275 MW of baseload capacity beginning in April 2008 and an additional 275 MW by December 2008. Most proposals could meet this schedule. For those proposals that could not meet the April and December dates, bridge power was included in the economic analysis for the months until the resource came on-line. This bridge power was priced at projected market prices and an estimate of expected cost of "firm" transmission for this bridge power was also included in the analysis.

Transmission

Proposals were analyzed for their ability to provide "firm" delivery to the EKPC system. If not provided in the RFP response, bidders were asked to describe their interconnection plans in detail. The economic analysis included the appropriate transmission costs associated with each proposal, including line losses, point-to-point transmission cost, interconnection costs, transmission line upgrades, and the cost of system impact studies and/or facilities studies.

Another aspect of the transmission analysis is the impact that a particular location of generation has on the EKPC transmission system. Locating the majority of the generation in one area of the state can cause voltage problems and VAR support problems in other areas of the state, as well as increase line losses. Splitting the 550 MW into two 275 MW blocks and locating in separate portions of the state provide transmission benefits to EKPC. Procuring the full 550 MW from one external source can also constrain the transmission interfaces and result in additional transmission risk.

Permitting Status

Obtaining proper permits is a critical step to insure that a proposal meets the scheduled commercial operation date. Permitting status was discussed with bidders in detail, including the RUS requirement of an Environmental Impact Statement (EIS). Bidders were informed that RUS requires an EIS for any facility constructed to serve the EKPC load. Also investigated with the bidders were specific permits required for particular proposals, such as siting certificates, construction permits, air permits, water withdrawal permits, landfill permits, etc.

Financial Viability

Each bidder was tasked with demonstrating adequate financial strength to complete the proposed project(s). As a part of the economic analysis, EVI researched the credit ratings of each company or parent company, if applicable, to determine if their rating is an investment grade rating (BBB- or higher). Some of the bidders are not publicly traded companies and therefore do not have a credit rating. In this case, questions were asked of the bidders relating to their financing sources. Such factors as performance guarantees and liquidated damages were discussed with the bidders. EKPC discussed the need for performance guarantees to fulfill their contractual obligations. A Guaranty Agreement from the parent company is an appropriate mechanism for backing up the obligations under the contract if the bidder fails to perform. Liquidated damages (\$/MWh/day) will be addressed in the development of a contract in case of a failure to deliver power. The amount would be a negotiated value based on the expected cost of replacement power. This obligation would be backed up with a form of security such as a letter of credit.

Operations

Reliability of the resource and EKPC's ultimate control over the dispatch of the resource are both imperative operational characteristics. The reliability of a resource is considered a crucial

operational characteristic in any contractual agreement. The economic analysis included assumptions for capacity factors of the proposals along with scenarios for various availability factors as considered necessary. Scheduling flexibility of a base resource is not as critical as the scheduling flexibility of a peaking resource, but was considered in the evaluation. Ultimate control of a resource versus a Power Purchase Agreement brings additional benefits to a utility such as ancillary services.

Conference Calls

Questions were developed specific to each bid. Please note that each question was not asked of each bidder. Questions are specific to particular proposals. The following is a list of actual questions and issues that were discussed with the bidders:

Capacity Amount:

• Will you consider a PPA with EKPC for half of the unit proposed?

EPC (Engineering, Procurement and Construction):

- Elaborate on the EPC team. Has the plant been designed? Please detail the roles of each team member.
- Have you requested bids from EPC firms? What is your proposed schedule for this process?
- What is your construction time table, permitting status? Who is your EPC contractor?
 Notice to proceed (NTP) date to meet 6/08 commercial operation date (COD)?
- Based on the EPC bids you received in July, do you expect changes to your capacity cost projections? If so, can you provide an update to those projections?

Financing:

- Who will finance the project?
- Discussion on financial performance guarantees.

Operating Characteristics:

Is the Heat Rate included in the proposal a LHV (low heating value) or HHV (high heating value)?

Ownership/Experience:

- Can you provide a general overview of the parties involved in this proposal?
- What experience do you have with large scale pulverized coal power plant projects?

Permitting Status:

- Are there any updates to the permit status as outlined in your proposal?
- Discussion on need for EIS: status, cost, impact on COD.
- Please discuss the status of the unconditional Construction Certificate.
- What is the status of your Air (PSD) Permit?
- What is the status of your Siting Certificate?

Pricing:

- Is the PPA pricing provided still valid past the deadline stated in your proposal?
- Is the variable O&M estimate included in your proposal in addition to the energy prices or already included in the energy price?
- What assumption are you using for coal price escalation? Do you have a long term contract?
- Please elaborate on the calculation of fuel costs.
- Is the monthly capacity payment firm?

- In your proposal, you have provided a capacity cost value for 2009. Do you expect this value to escalate on an annual basis or do you plan on having a fixed price for all years in the PPA?
- Can you provide some detail to your projection of the Energy Price? For example, fuel forecast, fixed and variable O&M forecasts, start up costs, capacity factor projections, etc.

Proposal Status:

- If EKPC were to procure half of the resource, do you currently have any other parties interested in the remaining output of the unit?
- Your proposal states that you are currently in discussions with several creditworthy utilities to own and operate the plant. What is the status of these discussions?

Site Selection:

Please discuss your site selection process. Do you have a preferred site identified? Are
you confident that you can obtain the necessary permits to allow for a December 2008
on-line date?

Transmission:

- Discuss the details of the preliminary transmission interconnection plan. Is any cost associated with the plan included in the proposal? Do you have an estimate for the cost of the transmission line upgrades? Do you have an estimate for the transmission service credits that you expect to receive from the substation upgrades?
- Have you begun the transmission interconnection process interconnection study, system impact study, etc?
- Can you provide additional information pertaining to the planned interconnection of the facility? Have System Impact studies been performed by LGE and/or AEP? Did these studies result in the need for a Facilities Study? Has an interconnection agreement been signed with either transmission provider?
- The proposal states that you believe firm transmission is available to EKPC from the delivery points. Has a System Impact study for transmission service been completed? If not, what information do you have pertaining to the availability of firm transmission service?
- What transmission costs assumptions have you included in your proposal? Have you included the \$3 million of interconnection costs? What are the results of the Facility Study completed in June 2004? Are there additional costs associated with this that will impact your proposal? Has an Interconnection Agreement been signed? If not, what is the status?
- Have you initiated a System Impact Study with PJM to determine the availability of Firm Point-to-Point Transmission Service from PJM to EKPC? If so, is a Facilities Study necessary? Have any additional costs been identified?

Water Availability:

- Please discuss the possible water sources for the project, including the possibility of building additional line to access the river. (Easements, permits etc.)
- What about the reliability of the water supply? Easements? River withdrawal permits? Reservoir?

Once the phone calls were completed and any additional information was received, the economic analysis was revised to include any updated assumptions. New rankings were developed and reviewed. If changes to the assumptions resulted in any additional bidders needing to be contacted or follow-ups to the original calls, additional phone calls and/or meetings were scheduled. The short list was developed based on the economics of the proposal along with the additional criteria as discussed above.

EnerVision's role in this process has been to support EKPC by performing an independent review and analysis of the proposals with a goal to find the best "least-cost" power supply alternative to meet the needs of EKPC. The first phase of this process has been finalized and results in a recommendation to EKPC to build and operate the Spurlock 4 Generating Station, one of EKPC's self-build proposals. Spurlock 4 will satisfy half of the baseload need. EKPC has made this recommendation to their Board and EnerVision's economic analysis supports this recommendation.

RFP NO. 2004-01 SUMMARY OF RESULTS

BASELOAD PROPOSALS

EnerVision Ranking of Economic Screening Results for Baseload Proposals Based on Average \$/MWh

October 2004

3%			
Rank	Bid#	Average \$/MWh	First Year (\$/MWh) (2004\$)
1	15	#4GE	
2	15	48 (48)	
3	15		
4	15		
5	28		
6	7	经	
7	11	William I	
8	22		
9	8		
10	31		
11	14		
12	35	A. S. S.	
13	16		
14	26	a second	

6%			
Rank	Bid#	Average \$/MWh	First Year (\$/MWh) (2004\$)
1	15		
2	15		
3	15		
4	15		
5	28		
6	11		
7	7		
8	31		
9	22		
10	16		
11	8		
12	26		
13	35		
14	14		

DESCRIPTION OF THE PROPOSED GENERATING FACILITIES AND SITE

Spurlock Power Station Site

Site Description

For environmental and design purposes the plant is located on the existing Spurlock Plant site in Mason County, Kentucky, with unrestricted access for delivery of large and/or heavy equipment by road, barge, or rail. The site has adequate soil conditions for equipment and building foundations, available fuel supply, limestone supply, water supply, sewage and waste treatment, transmission lines, and substation. The site currently contains one 525 MW pulverized coal generating unit and one 325 MW pulverized coal generating unit ("Gilbert Unit"). The Gilbert Unit is under construction with commercial operation expected April 1, 2005. The proposed unit would be essentially a duplicate of the Gilbert Unit.

Description of Spurlock 4

The proposed facility is a nominal 278 MW generating unit and consists of one CFB boiler, one turbine-generator, one flue gas desulfurization system, one baghouse, one stack, and associated balance of plant ("BOP") equipment. The BOP equipment includes the turbine-generator power cycle equipment. A distributed control system is provided for responsive load changes, reliable operation, and improved thermal performance.

The facility is designed to operate continuously with minimum scheduled downtime for annual inspections and infrequent major overhauls. Facility loading may vary hourly per system loading and the plant load is controllable from 35% to maximum plant capability. The boiler is a CFB type designed to deliver 2,018,142 lb/hr of steam 2414 psia and 1000° F. The minimum steam flow rate for the boiler is 35 % of boiler maximum continuous rating ("MCR") without auxiliary fuel support. The boiler and auxiliaries are designed for operation when burning the design fuel at 100% MCR. Number 2 fuel oil is used for boiler start-up.

Turbine/Generator Unit

Steam from the boiler is fed to a single-reheat condensing turbine-generator. The turbine is designed for a net output of 278 MW, based on throttle steam conditions of 2414 psia and 1000°F and condenser exhaust pressure of 2.5 in HgA operating at average annual wet bulb temperature. The continuous turbine-generator unit output is approximately 305.8 MW gross based on the design level.

Facility Design

The facility, composed of one boiler and one turbine, is designed to provide 278 MW net capacity under the design conditions as outlined in this section. The facility is designed to be capable of operation with a high equivalent capacity factor and is designed for a minimum of 30 years of operation with downtime for periodic inspections and maintenance. Facility electrical output and power factor may vary hourly in response to system loading demands. The facility's electrical output is controlled from 35% to 100% of net electrical unit capacity. The facility is designed, procured, constructed, checked-out, commissioned, and tested in accordance with practices typically applied in other similar electric utility production facilities.

Electrical Output

The facility is designed to provide up to 278 MW net electrical output to the local power grid at 0.85 power factor as measured at the high side of the main step up transformer.

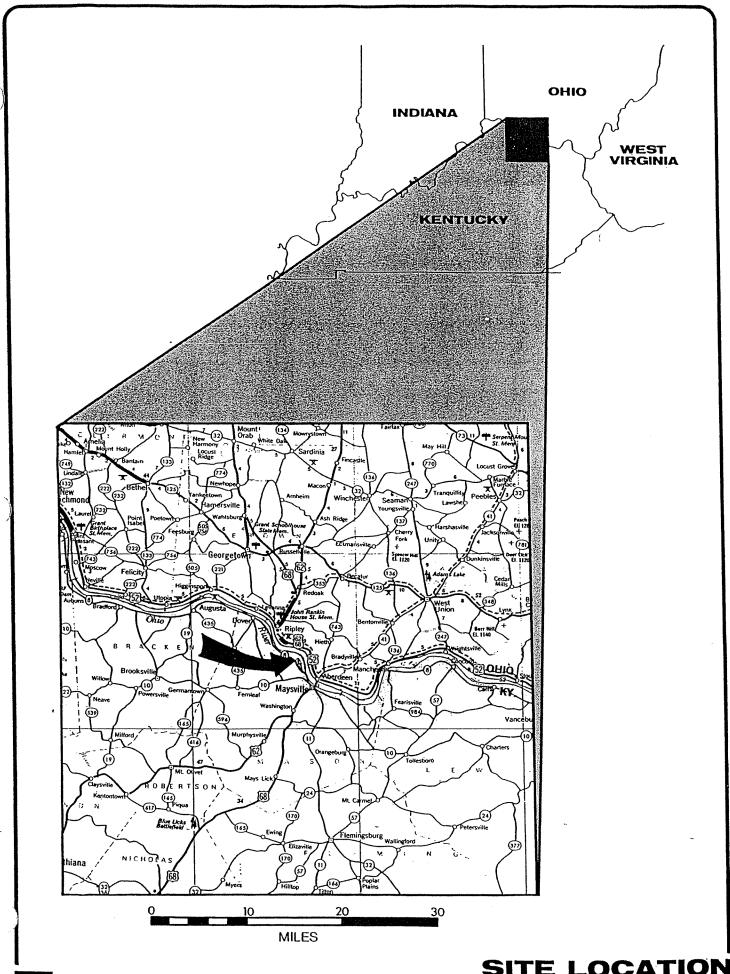
System Connection (Transmission Facilities)

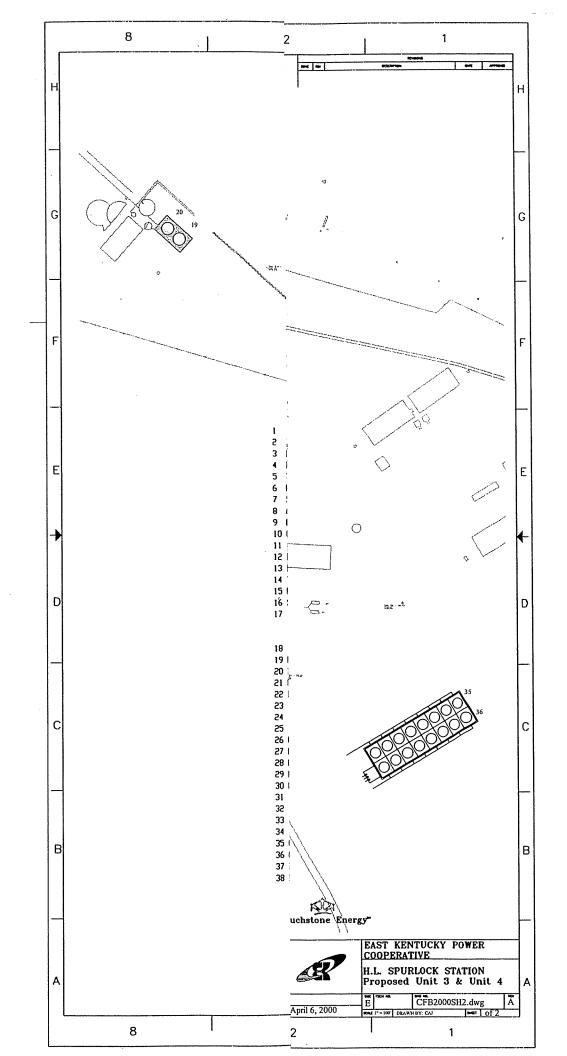
This unit will be connected to the East Kentucky Power Cooperative, Inc. transmission system via the existing Spurlock Substation. This substation has 345 kV and 138 kV busses and has existing transmission line outlets from the plant. The transmission facilities currently under construction for the Gilbert Unit at Spurlock Station will provide sufficient outlet capacity for Spurlock 4.

MAPS OF SPURLOCK 4 LOCATION

The maps listed below are included in Exhibit 5 on the following two pages:

- 1. Geographic Location in Kentucky
- 2. Plant Layout





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FIVE YEAR ANNUAL PROJECT COST ESTIMATE

Costs Associated with the Installation of Spurlock Unit 4 by April 1, 2008 (\$ Millions)

Costs of Spurlock Unit 4	2008	2009	2010	2011	2012
Fuel – Spurlock Unit 4			- 《新教	KS, 23	
Var. O&M – Spurlock Unit 4				5.45	200 (1975) 2 200 (1975) 2
Fixed O&M – Spurlock Unit 4			(E.A.)		
Fixed Capital – Spurlock Unit 4 (1)			100	Style 1	
Fixed Capital – Transmission (2)	3 1 1 1 3 1 1 23 3 1 1 1 1 1 1	S. Program		, wild to	
Transmission O&M	\$400.00	10.43	A SA		
Total Cost			See All Control		

- 1) Annual costs based on borrowing \$ million for 30 years at percent annual interest rate.
- 2) Annual costs based on borrowing \$ million for 30 years at percent annual interest rate.



COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

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COMPATIBILITY CERTIFICATE, FOR THE) CASE NO. 2004-
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CIRCULATING FLUIDIZED BED COAL FIRED UNIT IN)
MASON COUNTY, KENTUCKY)

PREPARED TESTIMONY OF ROY M. PALK ON BEHALF OF EAST KENTUCKY POWER COOPERATIVE, INC.

- Q1. Please state your name and address.
- A1. My name is Roy M. Palk and my business address is P. O. Box 707, Winchester, Kentucky 40392.
- Q2. By whom are you employed and in what capacity?
- A2. I am President and Chief Executive Officer of East Kentucky Power Cooperative in Winchester, Kentucky.
- Q3. How long have you been so employed by East Kentucky Power Cooperative?
- A3. Since March 1994.
- Q4. Have you testified before the Public Service Commission on prior occasions?
- A4. Yes.

- Q5. What are your duties and obligations to East Kentucky Power Cooperative?
- A5. As President and CEO of East Kentucky Power Cooperative, I am responsible for all aspects of the Cooperative including overall planning and strategic guidance of the Cooperative to meet the current and future needs of its 16 member distribution systems. This includes planning for future power supply and transmission facilities, providing for proper staffing and training of personnel needed for operating and maintaining the Cooperative's facilities, adequate financial planning, general corporate responsibilities, and development of strategic alliances to best serve our customers and owners, the 16 member distribution systems.
- Q6. What is the purpose of your testimony?
- A6. The purpose of my testimony is to explain how the proposed project supports our corporate objectives. EKPC's primary purpose is to assess the power supply and associated needs of its Member Systems and satisfy those needs as efficiently as possible. EKPC's Vision Statement states: "East Kentucky Power Cooperative is committed to a process of assessing and efficiently satisfying the power supply and associated needs of its members/owners." This commitment will be met through the effective use of human, capital, and physical resources and by incorporating the *Cooperative Principles* and Touchstone Energy Values into our business activities. As the electric market continues to evolve toward a more competitive business climate, there is an increasing emphasis on the value

EKPC offers its members. The cooperative way of doing business is an advantage today as well as in the future competitive marketplace. We support our Member System cooperatives by adding value to the services they offer their members. The fact that Warren RECC will become an EKPC member system effective as of April 1, 2008, shows that others recognize the value of the services provided by EKPC to its member systems. To be able to maximize value to the Member Systems, EKPC needs to continue to supply competitive and reliable power supply. EKPC's current portfolio of power supply resources provides reliable service at a very competitive cost. Events such as the collapse or withdrawal from the marketplace of many power trading entities and limitations in the transmission system like those leading to the blackouts of August 2003 have convinced me that the power supply provided to the Member Systems from EKPC's resource portfolio is of substantially more economic value and may be more reliable than power purchased from the wholesale power market. EKPC needs to maintain this advantage by maintaining existing power generation resources and incrementally adding new resources that are lower in cost than wholesale power supply markets can provide. By moving in this direction, EKPC can ensure its members that they will receive an economic and reliable source of power for the future, thus continuing to add value to the services they provide their members. The proposed Spurlock 4 generating unit is a resource that meets all of these goals. It is the best alternative for EKPC's business

mission, and is critical in meeting EKPC's commitment to Warren in a timely, economical manner.

- Q7. Does this conclude your testimony?
- A7. Yes.

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AFFIDAVIT	<u>2</u>
STATE OF KENTUCKY) COUNTY OF CLARK)	
Roy M. Palk, being duly sworn, states that he has testimony and that he would respond in the same manner upon taking the stand, and that the matters and things set to the best of his knowledge, information and belief.	to the questions if so asked
Subscribed and sworn before me on this 27th Nota	day of October, 2004. Oak, Danron ary Public
My Commission expires:	May 15, 2007

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

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PREPARED TESTIMONY OF DAVID G. EAMES ON BEHALF OF EAST KENTUCKY POWER COOPERATIVE, INC.

- Q1. Please state your name and address.
- A1. My name is David G. Eames and my business address is P. O. Box 707, Winchester, Kentucky 40392.
- Q2. By whom are you employed and in what capacity?
- A2. I am employed by East Kentucky Power Cooperative, Inc. and I am Vice President of Finance and Planning.
- Q3. As background for your testimony, please briefly describe your educational background and work responsibilities at East Kentucky Power Cooperative.
- A3. I received a Bachelor's degree in engineering from Northeastern

 University in 1971 and a Master's degree in Business Administration in

 1976 from the University of Michigan. I am a registered professional
 engineer and a certified public accountant in the Commonwealth of

- Kentucky. In addition, I have attended and participated in several seminars and supplemental training courses over the years. I have been employed by EKPC since January 1979 and have occupied my current position within the EKPC organization since September 1985.
- Q4. Were you involved in the preparation and development of EKPC's power supply plan to supply Warren RECC's load requirements in 2008?
- A4. Yes. EKPC staff under my direction used the Base-Intermediate-Peak ("BIP") model to perform an analysis of Warren's load data and the optimal generation portfolio to supply Warren's load requirements. The results indicated that a baseload unit with a nominal capacity of 250MW to 275MW would best provide the bulk of Warren's needs and approximately 150MW of peaking capacity would provide their peaking requirements.
- Q5. How did EKPC reach the conclusion that another baseload unit at Spurlock Station was the best alternative?
- A5. EKPC issued RFP 2004-01 on April 2, 2004 to request proposals for baseload and peaking capacity. EnerVision, Inc., an energy services consultant, was hired to assist in the evaluation of proposals and ranked them on economics. The proposal for Spurlock 4 developed by EKPC's Production department was the lowest cost proposal. In addition to ranking first economically, Spurlock 4 has the potential to meet the schedule to provide capacity to Warren beginning April 1, 2008.

- Q6. Were you involved in the evaluation process and preparation and of the RFP Summary that is filed as Applicant's Exhibit 4?
- A6. My staff and I worked with EnerVision to be sure that assumptions and costs used in the evaluation were applied evenly to all proposals.

 EnerVision prepared the ranking of proposals and summary report.
- Q7. Please provide the objectives of the RFP and results.
- A7. EKPC issued RFP No. 2004-01 on April 2, 2004, to meet the needs of the current member systems and Warren in the 2005 to 2011 timeframe.

 EKPC requested proposals for Power Purchase Agreements, generating equipment with or without the associated construction, ownership in part or all of an existing facility, and alternative energy solutions such as demand side resources. The RFP Summary shows that the best alternative for meeting the baseload needs and the timetable of Warren is the Spurlock 4 unit.
- Q8. Do you adopt Exhibit 4 to the Application as a part of your testimony?
- A8. Yes, I do.
- Q9. What is the estimated construction cost of the proposed baseload capacity addition and associated facilities?
- A9. The estimated installed cost for Spurlock 4 is \$ (2008\$) including the generator step-up transformer. The related transmission costs are estimated to be \$ (2008\$), all of which is for substation equipment and installation to interconnect the unit.

- Q10. Has East Kentucky Power Cooperative purchased any equipment or made any financial commitments to equipment for this project?
- A10. East Kentucky Power has not purchased any equipment for the project.

 However, EKPC has made expenditures for preliminary engineering work for the project.
- Q11. How will East Kentucky Power Cooperative finance the construction of the proposed project?
- A11. This facility is proposed to be financed by a RUS long-term guaranteed loan from the Federal Financing Bank. Prior to approval of the long-term financing by RUS, interim financing may be provided by the National Rural Utilities Cooperative Finance Corporation.
- O12. Describe the debt service structure associated with this loan.
- A12. The principal and interest on this loan will be paid on a quarterly basis.

 The loan will amortized over a period not to exceed 35 years.
- Q13. Assuming that the proposed baseload capacity comes on line as scheduled, what effect will the commercial operation of this unit have on East Kentucky Power Cooperative's projected power costs?
- A13. It is anticipated that Warren RECC will reimburse EKPC for any incremental increase in system costs caused by the additional capacity required to serve their needs. The exact methodology to be used to determine the additional amount ("Adder") Warren would pay is still under consideration and will be submitted to the Commission for its approval. One method could be to average the cost of Spurlock 4 with the

cost of the next future baseload unit to determine the baseload component of Warren's Adder. EKPC intends that the methodology chosen to calculate the Adder for the baseload component of capacity to serve Warren will cover the cost of Spurlock 4, as the lowest cost baseload option.

- Q14. The IRP Update Report discusses the status of power supply at EKPC including the impact of Warren RECC membership, status of current construction projects, EKPC's future capacity and load requirements, and the RFP process employed by EKPC. Do you adopt the IRP Update Report included as Exhibit 3 as a part of your testimony?
- A14. Yes, I do.
- Q15. Do you adopt the Five-Year Annual Project Cost Estimate for Spurlock 4 included as Exhibit 6 as a part of your testimony?
- A15. Yes, I do.
- Q16. Does this conclude your testimony?
- A16. Yes.

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

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AFFIDAVIT	
STATE OF KENTUCKY)	
COUNTY OF CLARK)	
David G. Eames, being duly sworn, states that he has a testimony and that he would respond in the same manner to the upon taking the stand, and that the matters and things set forth to the best of his knowledge, information and belief. David G.	a e questions if so asked therein are true and correct described by Eamler
Subscribed and sworn before me on this 26th day	of October, 2004. Oa Er Damor ublic, KY at Jarge
1 00	m 15-2007

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

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MASON COUNTY, KENTUCKY)

PREPARED TESTIMONY OF ROBERT E. HUGHES, JR. ON BEHALF OF EAST KENTUCKY POWER COOPERATIVE, INC.

- Q1. Please state your name and address.
- A1. My name is Robert E. Hughes, Jr. and my business address is P. O. Box 707, Winchester, Kentucky 40392.
- Q2. By whom are you employed and in what capacity?
- A2. I am employed be East Kentucky Power Cooperative, Inc. and I am Manager, Environmental Affairs Process.
- Q3. As background for your testimony, please briefly describe your educational background and work responsibilities at East Kentucky Power Cooperative.
- A3. I received a B.S. in 1970 and an M.S. in 1973, both in Biological Sciences from the University of Kentucky. I have occupied my current position with East Kentucky Power Cooperative since 1974. I am responsible for the cooperative's compliance with environmental laws and regulations.

- Q4. Are there any additional air, water, or other environmental permits required for the operation of the proposed unit? Please explain.
- A4. An air quality construction/operation permit must be obtained.
 Application was made on September 13, 2004. A revised water discharge permit will be required to reflect changes in water flows as a result of operation of the new unit.
- Q5. How long is the air permit valid?
- A5. Construction must begin within 18 months of issuance of the construction permit.
- Q6. Has EKPC submitted a Cumulative Site Assessment Report for the proposed unit to be located at the Hugh L. Spurlock Power Station to demonstrate the site compatibility of the project?
- A6. An environmental report entitled "Environmental Assessment for Gilbert Unit 3 and Unit 4," dated January 2002, was supplied to the Rural Utilities Services under the National Environmental Policy Act. A Finding of No Significant Impact ("FONSI"), dated February 2002, was issued by RUS regarding the proposed project. The report is included in the filing of this certificate application as Applicant's Exhibit 14. Included with the report is the FONSI from RUS.
- Q7. Do you adopt the "Environmental Assessment for Gilbert Unit 3 and Unit 4" filed in this case as Exhibit 14 as a part of your testimony?
- A7. Yes, I do.
- O8. Does this conclude your testimony?
- A8. Yes.

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AFFIDAVIT	
STATE OF KENTUCKY)	

Robert E. Hughes, Jr., being duly sworn, states that he has read the foregoing prepared testimony and that he would respond in the same manner to the questions if so asked upon taking the stand, and that the matters and things set forth therein are true and correct to the best of his knowledge, information and belief.

)

Robert E. Hughes, Jr.

Subscribed and sworn before me on this $27^{\frac{t}{L}}$ day of October, 2004.

Notary Public

My Commission expires:

COUNTY OF CLARK

		·	

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

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MASON COUNTY, KENTUCKY)

PREPARED TESTIMONY OF PAUL C. ATCHISON

ON BEHALF OF EAST KENTUCKY POWER COOPERATIVE, INC.

- Q1. Please state your name and address.
- A1. My name is Paul C. Atchison and my business address is P. O. Box 707, Winchester, Kentucky 40392.
- Q2. By whom are you employed and in what capacity?
- A2. I am employed by East Kentucky Power Cooperative, Inc., and I am Vice President of the Power Delivery Business Unit.
- Q3. As background for your testimony, please briefly describe your educational background and work experience.
- A3. I graduated in 1966 with a Bachelor of Science Degree in Electrical

 Engineering from the Tennessee Technological University. I am a

 Licensed Professional Engineer in the Commonwealth of Kentucky. My

 work experience has included 15 years as Planning Engineer for Warren

 Rural Electric Cooperative Corporation. I have been with East Kentucky

Power Cooperative since February, 1981. After coming to work at East Kentucky, I was Manager of the System Planning Department for 10 years that included transmission planning, and have been in my current position since 1991. One of the areas for which I am currently responsible with Power Delivery is transmission planning.

- Q4. What is the purpose of your testimony?
- A4. The purpose of my testimony is to discuss the proposed transmission facilities East Kentucky Power Cooperative has chosen to construct in conjunction with the installation of the proposed Spurlock 4 unit at the Hugh L. Spurlock Power Station. The interconnection of the proposed Spurlock 4 unit to the transmission system will require certain improvements to the switchyard, but will not require any new transmission line construction. The transmission improvements necessary to the switchyard include a GSU transformer, 345kV breakers, and terminal facilities. The estimated cost of these facilities (excluding the GSU transformer) is \$ million (2008\$). The GSU transformer cost is included in the generating project cost. The transmission outlet facilities already under construction for the Gilbert Unit at Hugh L. Spurlock Power Station will be sufficient to transmit the output of Spurlock 4 into the power transmission system.
- Q5. Are there any approvals required pursuant to KRS §278.020 and 807 KAR 5:120?

- A5. No. The proposed transmission facilities are not impacted by KRS §278.020 and 807 KAR 5:120.
- Q6. Does this conclude your testimony?
- A6. Yes.

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STATE OF KENTUCKY) COUNTY OF CLARK) Paul C. Atchison, being duly sworn, states that he has testimony and that he would respond in the same manner to the same man	ne questions if so asked
upon taking the stand, and that the matters and things set forth to the best of his knowledge, information and belief. Paul C. A.	O athum
Subscribed and sworn before me on this 27th day Notary P	Da E. Damon
My Commission evnires:	u 152007

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CONVENIENCE AND NECESSITY, AND A SITE)
COMPATIBILITY CERTIFICATE, FOR THE) CASE NO. 2004-
CONSTRUCTION OF A 278 MW (NOMINAL))
CIRCULATING FLUIDIZED BED COAL FIRED UNIT IN)
MASON COUNTY, KENTUCKY)

PREPARED TESTIMONY OF JAMES SHIPP ON BEHALF OF EAST KENTUCKY POWER COOPERATIVE, INC.

- Q1. Please state your name and address.
- A1. My name is James Shipp and my business address is P. O. Box 707, Winchester, Kentucky 40392.
- Q2. By whom are you employed and in what capacity?
- A2. I am employed be East Kentucky Power Cooperative, Inc. and I am Manager, Plant Engineering.
- Q3. As background for your testimony, please briefly describe your educational background and work responsibilities at East Kentucky Power Cooperative.
- A3. I graduated from the University of Kentucky with a Bachelor of Science

 Degree in mechanical engineering and am a registered professional
 engineer in the State of Kentucky. I have occupied my current position
 with East Kentucky Power Cooperative since 1978. I am responsible for

- the engineering requirements of the generating facilities owned by East Kentucky Power Cooperative.
- Q4. Can you briefly describe the proposed generating unit?
- A4. The proposed generating unit is a nominal 278 MW unit and consists of one CFB boiler, one turbine-generator, one flue gas desulfurization system, one bag house, one stack, and associated balance of plant equipment. The balance of plant equipment includes the feedwater heaters, power piping, transformers, cooling tower, chimney, electrical and other power cycle equipment. The proposed unit is essentially identical to the Gilbert Unit at Spurlock Power Station that is currently under construction. The proposed Spurlock 4 unit would be constructed adjacent to the Gilbert Unit and will duplicate the Gilbert Unit as much as possible. Due to some slight design modifications, the proposed Spurlock 4 unit would have a capacity of 278 MW compared to the 268 MW of the Gilbert Unit.
- Q5. What is required to construct an additional CFB generating unit at the Spurlock Power Station?
- A5. Much of the existing infrastructure can support the addition of a 278 MW

 CFB unit. Water supply, coal handling, treated water, liquid waste

 treatment, ash disposal, maintenance shops, warehouse, and administrative

 offices are all capable of supporting the additional CFB unit.
- Q5. Has EKPC solicited bids for the equipment and construction of this unit?

- Stanley Consultants, Inc., has been retained to develop plans and A5. specifications for the proposed unit. It is estimated that there would be 21 construction and equipment contracts. The major contracts are for the design engineering and construction management, turbine generator, boiler, and balance of plant. At the EKPC September 2004 Board Meeting, the Board approved a contract with Stanley Consultants to provide engineering services and assist with construction management. The Board also approved a contract with General Electric Company to furnish and install the turbine generator, and at the October Board meeting awarded a contract to Alstom to furnish and install the boiler and associated equipment. Board approval of these three contracts was made contingent on approval of the proposed project by the Commission. These three contracts were awarded following RUS procedures, and the remaining contracts will also be awarded following RUS procedures. General Electric and Alstom have approval only to do Engineering.
- Q6. Has EKPC purchased any equipment or made any financial commitments to equipment or started any construction for this project?
- A6. Contracts have been awarded to General Electric and Alstom but General Electric and Alstom only have approval to do Engineering and do not have approval to purchase, manufacture or construct any equipment.
- Q7. Do you adopt the "Description of the Proposed Facilities and Site" filed in this case as Exhibit 5 as a part of your testimony?
- A7. Yes, I do.

- Q8. Does this conclude your testimony?
- A8. Yes.

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:	
THE APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR A CERTIFICATE OF PUBLI CONVENIENCE AND NECESSITY, AND A SITE COMPATIBILITY CERTIFICATE, FOR THE CONSTRUCTION OF A 278 MW (NOMINAL) CIRCULATING FLUIDIZED BED COAL FIRED UNIT I MASON COUNTY, KENTUCKY)) CASE NO. 2004-)
AFFIDAVIT	
STATE OF KENTUCKY) COUNTY OF CLARK)	
James Shipp, being duly sworn, states that he has retestimony and that he would respond in the same manner to upon taking the stand, and that the matters and things set for to the best of his knowledge, information and belief.	the questions if so asked
James	Shipp Shyp
Subscribed and sworn before me on this 22 de Notary	ay of October, 2004. Value of October, 2004. Public
My Commission expires:	10.15 2007

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EXHIBIT 12

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

THE APPLICATION OF EAST KENTUCKY POWER)
COOPERATIVE, INC. FOR A CERTIFICATE OF PUBLIC)
CONVENIENCE AND NECESSITY, AND A SITE)
COMPATIBILITY CERTIFICATE, FOR THE) CASE NO. 2004-
CONSTRUCTION OF A 278 MW (NOMINAL))
CIRCULATING FLUIDIZED BED COAL FIRED UNIT IN)
MASON COUNTY, KENTUCKY)

PREPARED TESTIMONY OF JERRY BORDES ON BEHALF OF EAST KENTUCKY POWER COOPERATIVE, INC.

- Q1. Please state your name and address.
- A1. My name is Jerry Bordes and my business address is P. O. Box 707, Winchester, Kentucky 40392.
- Q2. By whom are you employed and in what capacity?
- A2. I am employed be East Kentucky Power Cooperative, Inc. as Production Services Manager.
- Q3. As background for your testimony, please briefly describe your educational background and work responsibilities at East Kentucky Power Cooperative.
- A3. I graduated from the Cumberland College with a Bachelor of Science

 Degree in Chemistry. I have held progressively responsible positions

 within the Production group and I have occupied my current position with

 East Kentucky Power Cooperative since 2001. I am responsible for the

- fuel procurement for the generating facilities owned by East Kentucky Power Cooperative.
- Q4. What is the basis for the fuel costs used in Applicant's Exhibit 6, "Five Year Annual Project Cost Estimate"?
- A4. The fuel costs used were based on a fuel study entitled "Updated Fuel,

 Emission Allowance and Lime/Limestone Projections 2004-2025", dated

 May 2004. The study was performed by Energy Ventures Analysis, Inc.

 ("EVA") of Arlington, Virginia.
- Q5. What was the nature of your involvement in the fuel study performed by EVA?
- A5. I was the lead person for EKPC. I was responsible for supplying EKPC data, coordinating the timing of the study with EVA, and ensuring that the results were made available to EKPC staff to perform analysis of the operating cost of the proposed unit.
- Q6. Can you describe the fuel requirements for the proposed unit and how it compares to the Gilbert Unit at Spurlock Power Station?
- A6. Spurlock 4 will be capable of burning an ash content up to 30 percent, a sulfur content up to 4.5 percent, and a Btu as low as 8,700 per pound. It will also be able to utilize petroleum coke, tire-derived fuel, and biomass as alternative fuel sources. The annual burn will be approximately 1.2 million tons of coal per year. The Gilbert Unit and the proposed Spurlock 4 unit are basically identical. Therefore, our experience with various fuels burned in the Gilbert Unit should be valuable as we get

closer to operating Spurlock 4. Spurlock 4 will be fueled during the startup and performance testing period with various types of coal purchased from spot and contract solicitations. After the commercialization of the unit, EKPC may evaluate alternative fuels such as petroleum coke, tire-derived fuel, and biomass subject to experience gained from the Gilbert Unit.

- Q8. Does this conclude your testimony?
- A8. Yes.

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:	
THE APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR A CERTIFICATE OF PUBLICONVENIENCE AND NECESSITY, AND A SITE COMPATIBILITY CERTIFICATE, FOR THE CONSTRUCTION OF A 278 MW (NOMINAL) CIRCULATING FLUIDIZED BED COAL FIRED UNIT MASON COUNTY, KENTUCKY)) CASE NO. 2004-)
AFFIDAVIT	
STATE OF KENTUCKY)) COUNTY OF CLARK)	and the foregoing prepared
Jerry Bordes, being duly sworn, states that he has retestimony and that he would respond in the same manner to upon taking the stand, and that the matters and things set for the best of his knowledge, information and belief. Jerry	o the questions if so asked
Subscribed and sworn before me on this 37 to Notar	lay of October, 2004. Da E Damron y Public
My Commission expires:	ay 15,2007

EXHIBIT 13

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

THE APPLICATION OF EAST KENTUCKY POWER)
COOPERATIVE, INC. FOR A CERTIFICATE OF PUBLIC)
CONVENIENCE AND NECESSITY, AND A SITE)
COMPATIBILITY CERTIFICATE, FOR THE) CASE NO. 2004-
CONSTRUCTION OF A 278 MW (NOMINAL))
CIRCULATING FLUIDIZED BED COAL FIRED UNIT IN)
MASON COUNTY, KENTUCKY)

PREPARED TESTIMONY OF JAMES C. LAMB ON BEHALF OF EAST KENTUCKY POWER COOPERATIVE, INC.

- Q1. Please state your name and address.
- A1. My name is James C. Lamb and my business address is P. O. Box 707, Winchester, Kentucky 40392.
- Q2. By whom are you employed and in what capacity?
- A2. I am employed by East Kentucky Power Cooperative, Inc. and I am Manager of the Market Research Process.
- Q3. As background for your testimony, please briefly describe your educational background and work responsibilities at East Kentucky Power Cooperative.
- A3. I graduated in 1979 with a Bachelor of Science Degree in Economics from Centre College. I graduated in 1989 with a Masters of Business

 Administration from the University of Kentucky. I have held progressively responsible positions within EKPC's planning process, the

- energy control center, and market research process since 1981, specifically in the load forecasting area.
- Q4. Were you involved in the preparation of the 2004 LFR?
- A4. Yes.
- Q5. What was the nature of your involvement in that report?
- A5. I participated in the collection of data and development of assumptions that were used in developing the results, and prepared the report with the assistance of Market Research personnel.
- Q6. Please provide the objectives of this report and how it is used.
- A6. The objective of the 2004 LFR is to forecast EKPC's long-term demand for electricity. The report contains a twenty-year projection of peak demand and energy requirements for EKPC, representing the summation of the load forecasts for each of its member distribution cooperatives.

 EKPC employs the load forecast in such areas as marketing analysis, transmission planning, power supply planning, and financial forecasting. The 2004 LFR was approved by the EKPC Board of Directors at its September 2004 Board Meeting and will be sent to RUS for approval in the near future.
- Q7. Are there any significant changes in the 2004 LFR that need to be discussed?
- A7. One significant change is that this is the first load forecast that has been developed since Warren accepted membership into the EKPC system.

 Warren will become a member distribution cooperative of EKPC on April

- 1, 2008, and bring the number of EKPC members to 17. Market Research staff met with Warren to develop their load forecast in a consistent manner with EKPC's other members. Generally, the 2004 LFR energy and winter peak projections are consistent with the 2002 LFR. The summer peak load in the 2004 LFR is lower than previously forecasted due to improved appliance saturation estimates.
- Q8. Please summarize the results of the 2004 LFR?
- A8. The 2004 LFR indicates that EKPC's total energy requirements are projected to increase by 3.6 percent per year over the 2004-2024 time period. Net winter peak demand will increase by approximately 2,400 MW over this time period, or 3.7 percent per year, and net summer peak demand will increase by approximately 2,100 MW over this time period, or 3.7 percent per year. Annual load factor projections decline slightly to about 53 percent.
- Q9. Do you adopt the 2004 LFR Executive Summary filed in this case as Exhibit 2 as a part of your testimony?
- A9. Yes, I do.
- Q10. Does this conclude your testimony?
- A10. Yes.

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

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THE APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY, AND A SITE COMPATIBILITY CERTIFICATE, FOR THE CONSTRUCTION OF A 278 MW (NOMINAL) CIRCULATING FLUIDIZED BED COAL FIRED UNIT IN MASON COUNTY, KENTUCKY))) CASE NO. 2004-))
AFFIDAVIT	
STATE OF KENTUCKY) COUNTY OF CLARK)	
	e questions if so asked therein are true and correct
James C.	Lamb
Subscribed and sworn before me on this 26 day Notary P	of October, 2004.
My Commission expires:	y 15, 2007